

California Highways and Public Works

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Department of Public Works, State of California

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Jimtown Bridge

Sonoma County's New F. A. S. Span
Over Russian River Completed

By MARSHALL M. WALLACE, County Road Commissioner

THE OPENING of the Jimtown Bridge across the Russian River on November 4, 1949, marked the completion of the second major bridge project on the Federal Secondary System in Sonoma County.*

The project is located on the Healdsburg Road, FAS-788, which crosses Alexander Valley connecting U. S. 101 from a point north of Healdsburg with State Sign Route 28 east of Geyserville, at Jimtown. In connecting these two state highways, an appreciable saving in mileage is made to traffic traveling from the northeast section of the county toward Healdsburg and southerly to Santa Rosa, the Bay area, and to the resort areas along the Russian River and the Pacific Coast. This reduced mileage is also af-

* Editor's Note: This is a Federal Aid County Road Project.

forded to traffic originating in Southern Lake County and in the northwest end of the Napa Valley.

Farm-to-market Route

The road itself furnishes means of transporting produce to plants and distribution centers and is used extensively by the local farming interests in the operation of their farms, dairies, and other agricultural establishments. With the opening of this new bridge, the decrease in delays due to high water and the removal of the load limit should greatly reduce operational costs and add to the convenience of those using this road.

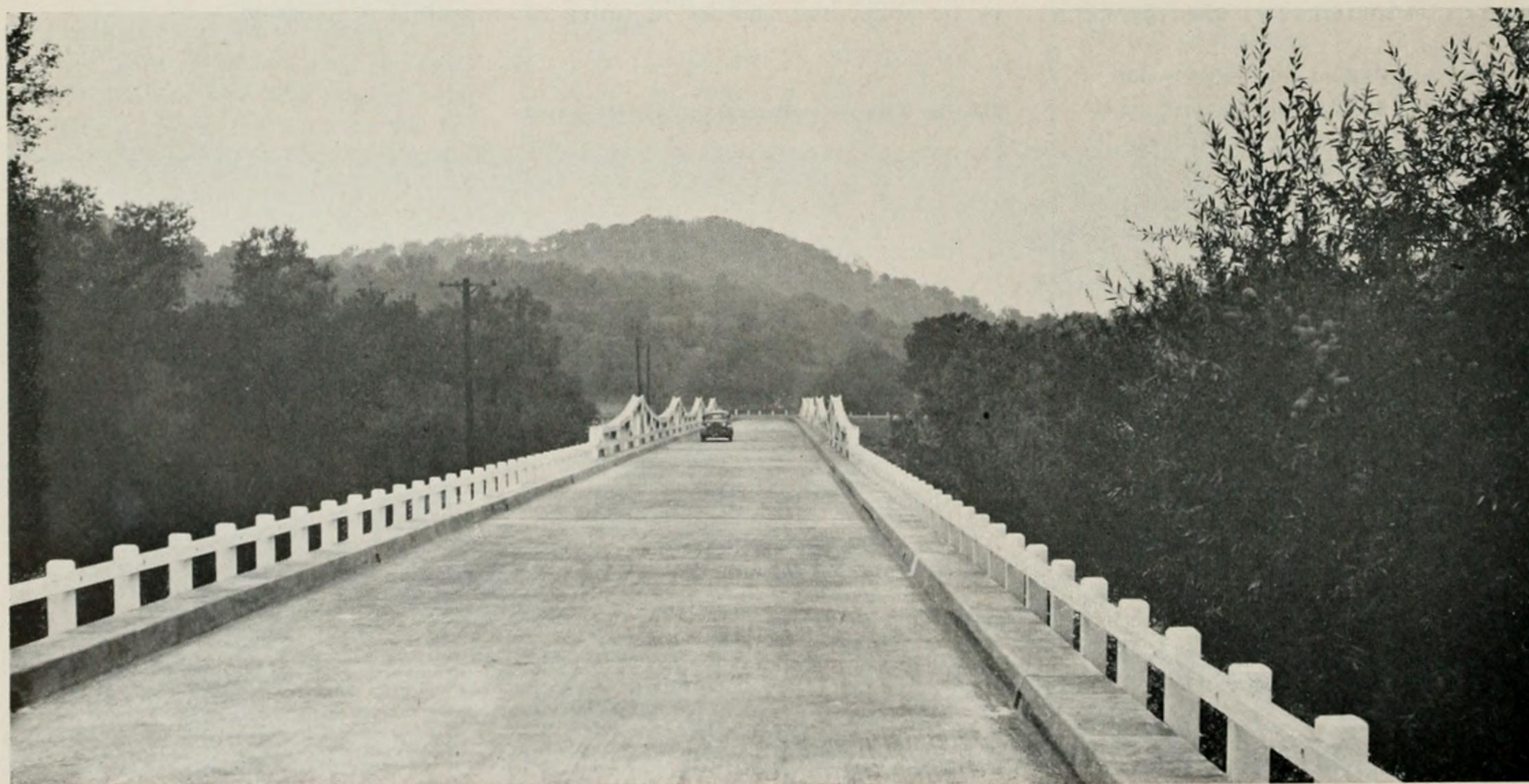
The grade of both bridge and highway have been raised to an elevation above the highest recorded high water; the traffic delays due to high water will be materially lessened by this construction. Though other por-

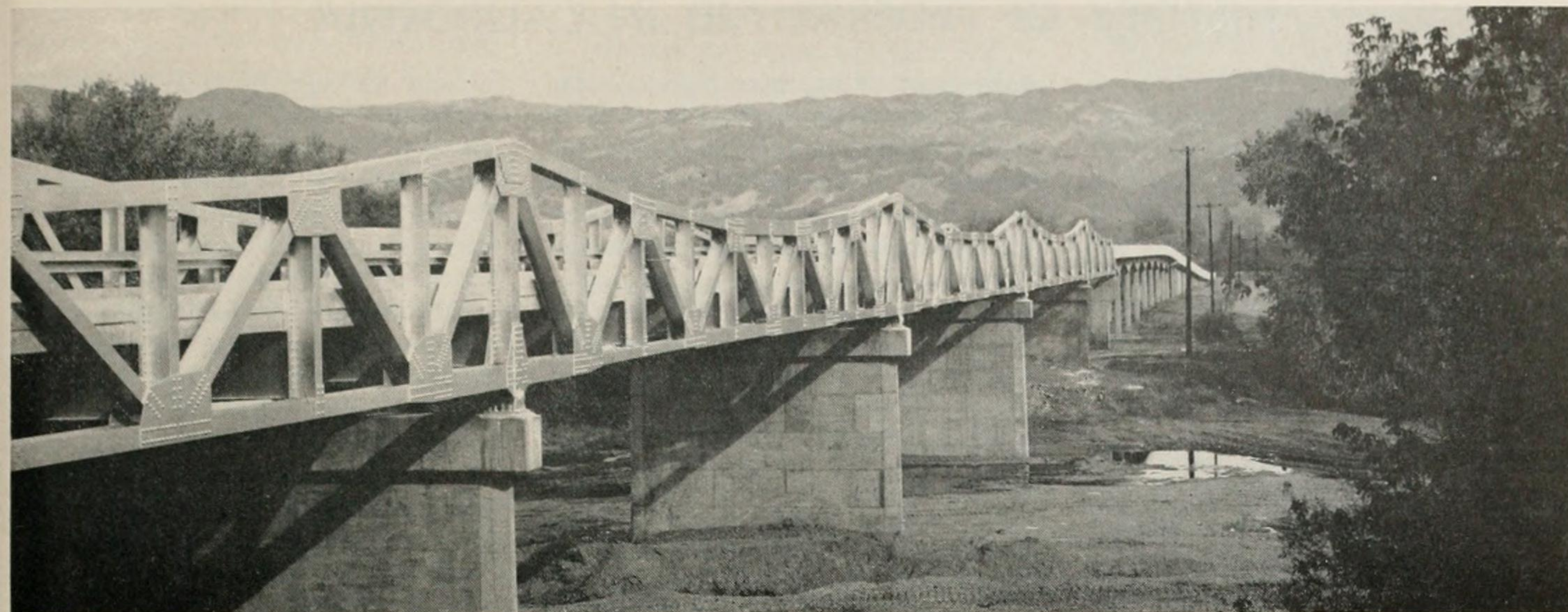
tions of the route are still subject to high water, the lowest grades on the route which were within the limits of the construction have been eliminated. Also, the new structure will permit the unrestricted movement of legal loads over the route, and will eliminate the one-way traffic to which the trucks and busses were subjected in using the bridge.

Unusually Long Structure

The new bridge, 1,384 feet in length, replaces a bridge consisting of lightly designed truss spans and timber trestle approaches which were posted for less than legal loads and limited to one-way travel for trucks and busses. Also replaced by the new structure was a wooden pile trestle spanning an overflow channel on the northeast side of the river. In addition to the bridge, 0.22 mile of roadway was constructed to replace the southwest approach

Jimtown Bridge over Russian River looking north and showing truss spans and south approach





Another view of Jimtown Bridge from river bank

which was substandard as to width and alignment.

The structure consists of three 120-foot and two 84-foot steel pony truss spans with concrete deck, eight 45-foot concrete slab and girder spans and 19 concrete slab spans. The bridge has a 24-foot clear roadway between 1-foot, 8-inch widened curbs. Steel footing piles are used under the piers for the truss spans and for the slab and

girder spans, while the flat slab spans are placed on steel piles with concrete extensions. The graded section of the approach is 32 feet wide, to which was applied a 24-foot bituminous macadam pavement.

Preliminary engineering work was performed under the direction of the county road department. Construction was done under contract by the C. B. Tuttle Company of Long Beach, at a cost of approximately \$373,000. Con-

struction engineering was performed by the Division of Highways, with G. C. Smith as Resident Engineer.

The right of way was acquired by the County of Sonoma and all cost of the acquisition was borne by the county. Construction costs were met by federal aid secondary funds provided by the Federal Aid Highway Act of 1944, and by state matching funds provided under the County Highway Aid Act of 1945.

Progress Report

Continued from page 23 . . .

concrete lining. A 10-inch clay sewer pipe was also constructed to serve a small section of state-owned property near the structure.

Backfilling Required

There was a considerable amount of backfilling to be done behind the bridge abutments and wingwalls. The contractor devised a very satisfactory method of compacting this material in the restricted spaces which were available.

A 15-inch pipe 9 feet long was poured full of concrete using steel scraps for aggregate so that weight of the tamping unit totaled about 3,500 pounds. This tamper was operated inside of an 18-inch steel pipe 21 feet long. Used in conjunction with a crane, the tamper was lifted and dropped inside of the larger pipe, compacting the

fill material under blows of about 3 feet. The arrangement worked very satisfactorily and relative compactions of well over 95 percent were obtained even though the material was placed in 3-foot lifts.

The structure was designed and constructed by the Division of Highways, Bridge Department, under the direction of F. W. Panhorst, Bridge Engineer. Oberg Bros. Construction Company were general contractors on the work. The steel was fabricated by the Consolidated Western Steel Corporation. H. Ross Clinton was the Laboratory Inspector in charge of the steel fabrication inspection, and J. M. Peterson acted as Resident Engineer for the Bridge Department.

The approximate final cost of the project will be about \$675,000. The accompanying photographs showing the steel construction were furnished by Consolidated Western Steel Company.

MARIN COUNTY INTERESTED

MARIN COUNTY PLANNING COMMISSION

*California Highways and
Public Works
Sacramento, California*

GENTLEMEN: Your official journal of the Division of Highways has been a constant source of information to this office.

We were particularly interested in the article "Service Town, U. S. A." in the September-October issue. This seemed a proof that proper highway design can add greatly to the welfare of any community.

Members of our commission and other public officials of Marin have expressed an interest in this article and we are wondering if you would be able to send to this office 12 copies of the September-October issue.

Sincerely yours,

MARY ROBINSON GILKEY
Planning Technician